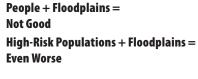
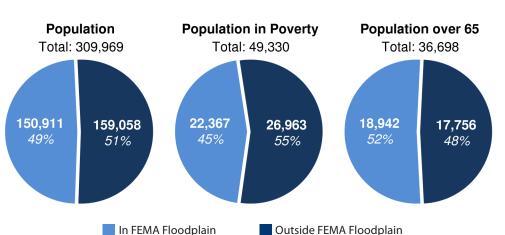
# **Charleston County, South Carolina**



The more homes and people located in a floodplain, the greater the potential for harm from flooding. Impacts are likely to be even greater when additional risk factors (age, income, capabilities) are involved, since people at greatest flood risk may have difficulty evacuating or taking action to reduce potential damage.

Based on 2000 U.S. Census records.

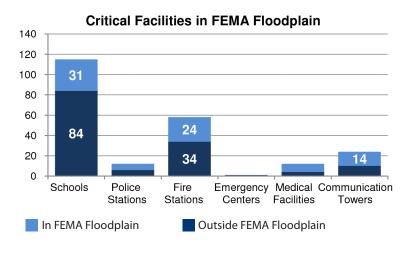


### Community Infrastructure + Floodplains = Bad News

37% of critical facilities and 40% of road miles (1260 miles) in Charleston County are within the floodplain.

Hospitals. Roads. Schools. Shelters. These facilities play a central role in disaster response and recovery. Understanding which facilities are exposed, and the degree of that exposure, can help reduce or eliminate service interruptions and costly redevelopment. Incorporating this information into development planning helps communities get back on their feet faster.

Based on Critical Facilities from FEMA HAZUS database.



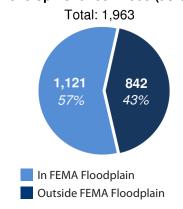
# Increasing Development in Floodplains = More People in Harm's Way

# Loss of Natural Buffers = Less Protection

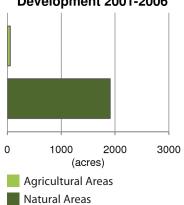
A county with more natural areas (wetlands, forests, etc.) and less development within floodplains typically has lower exposure to flooding. A county that monitors land cover changes within the floodplain will detect important trends that indicate whether flood exposure is increasing or decreasing. Armed with this information, local leaders can take steps to improve their safety and resilience.

Based on NOAA land cover data.

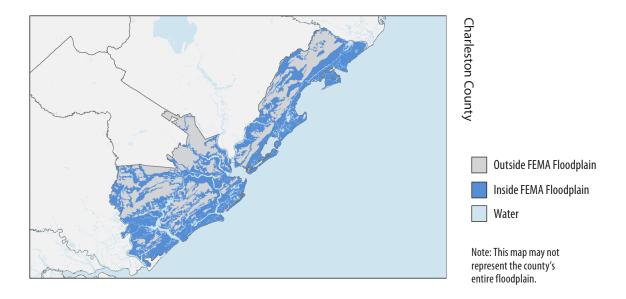
## Amount of Land Converted to Development 2001-2006 (acres)



### Type of Land Converted to Development 2001-2006







# **Next Steps**

Through adaptation planning, all communities can be better prepared to face coastal hazards. While each community is different, there are some basic steps that all communities can follow to become more resilient.

**Training** that will lead your organization through this task can be brought to your office. Visit the Roadmap for Adapting to Coastal Risk Training (www.csc.noaa.gov/training/roadmap.html) to learn more. Many of the components of this course (which are outlined below) can be found within the Digital Coast's Coastal Inundation Toolkit (www.csc.noaa.gov/inundation).

- **1. Know your risks** If your county has a hazard mitigation plan, get a copy of it from your county emergency management office or the Federal Emergency Management Agency (FEMA) (www.fema.gov/plan/mitplanning/status.shtm#1). Having county information about potential hazards, vulnerabilities, and priority hazard mitigation projects is important.
- **2. Develop a team** To see the issues and opportunities from as many perspectives as possible, engaging a diverse group of stakeholders is always a good idea. The County Snapshots (www.csc.noaa.gov/snapshots) are used to help people visualize the issues.
- **3. Know what resources are available** Federal and state agencies have funds available for risk reduction activities. See the funding opportunities listed below to learn more. There are also data and tools available to help people visualize the issues and solutions. For information on creating inundation maps for your community, visit the map section of the Coastal Inundation Toolkit. (www.csc.noaa.gov/inundation/map).
- **4. Discover what others are doing** See how other communities are addressing these issues. Visit the discover section of the Coastal Inundation Toolkit. (www.csc.noaa.gov/inundation/discover). You may also contribute a story about your community efforts.

#### **Data Sources**

- Flood Zones Based on FEMA 1% annual chance flood zones http://msc.fema.gov
- Critical Facilities FEMA HAZUS-MH data www.fema.gov/plan/prevent/hazus/
- Roads Based on ESRI 2005 streets data
- **Demographic Data** NOAA http://stics.noaa.gov
- Land Cover Data NOAA www.csc.noaa.gov/digitalcoast/data/landcover.html

#### **Funding Opportunities**

- FEMA www.fema.gov/government/grant/hmgp/
- NOAA Coastal Management Program http://coastalmanagement.noaa.gov/mystate/